

REMARKS

The following Amendment is submitted in response to the Office Action of 10/1/04. In the Office Action of 10/1/04, claim 1 was rejected under U.S.C. 102(b) as being anticipated by Miller et al. (U.S. Patent No. 6,759,787, hereinafter Miller). Claim 1 has been canceled and new
5 claims 2-21 have been added. Accordingly, claims 2-21 remain pending after entry of this Amendment.

I. Rejection Under U.S.C. 102(b)

In the Office Action, claim 2 was rejected under U.S.C. 102(b) as being anticipated by Miller. Applicants have canceled claim 1 and added claims 2-21, and as the rejection may be
10 applied to the new claims, respectfully traverse.

New claim 2 recites a microelectromechanical (MEMS) structure on a substrate, comprising:

a platform connected with a set of one or more bimorph flexures;
and
15 the set of bimorph flexures connecting the platform with the substrate, each bimorph flexure comprising a first material and a second material having substantially similar coefficients of thermal expansion (CTEs).

20 Applicants respectfully submit that Miller does not disclose, teach, or even suggest each limitation of claim 2. For instance, Miller does not disclose, teach, or even suggest a MEMS structure comprising a platform connected with a set of bimorph flexures wherein each bimorph flexure comprises first and second materials having substantially similar coefficients of thermal expansion (CTEs). Rather, Miller states that member can comprise an oxide material encased
25 within a polysilicon body (col. 3, lines 30-33 and col. 16, lines 32-42). No where in Miller is it disclosed, taught, or even suggested that the member is comprised of first and second materials having substantially similar coefficients of thermal expansion (CTEs).

For the above reasons, Applicants respectfully submit that new claim 2 is patentable over the cited art. Claims 3-13 are dependent upon claim 2 and are allowable for at least the same reasons as claim 2.

Further, claim 10 requires that “each bimorph flexure comprises a two-layer structure, the first material comprising a first layer and the second material comprising a second layer that is external to the first layer,” and claim 11 requires that “the second layer extends over a portion of the first layer that is less than the entire length of the first layer.” As disclosed in Miller, however, the member is comprised of an oxide core that is completely encased within a polysilicon body (col. 16, lines 32-42). As such, the Applicants submit that Miller also does not teach or suggest the additional features of claim 10 or claim 11.

New claim 14 recites a method for fabricating a microelectromechanical (MEMS) structure on a wafer, the method comprising:

forming a platform connected with a set of one or more bimorph flexures; and
for each bimorph flexure in the set of bimorph flexures:
forming a first layer of the bimorph flexure, the first layer comprising a first material; and
forming a second layer of the bimorph flexure, the second layer comprising a second material, the first and second materials having substantially similar coefficients of thermal expansion (CTEs).

New claim 14 contains the “substantially similar coefficients of thermal expansion” limitation of claim 2 and is also in allowable form. Claims 15-21 are dependent upon claim 14 and are allowable for at least the same reasons as claim 14.

CONCLUSION


In view of the foregoing, it is submitted that all pending claims, namely claims 2-21, are in condition for allowance. Reconsideration of the rejection is requested. Allowance is earnestly solicited at the earliest possible date.

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Respectfully submitted,

STATTLER, JOHANSEN & ADELI LLP

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Gregory Suh
Reg. No. 48,187

Stattler Johansen & Adeli LLP
PO Box 51860
Palo Alto, CA 94303-0728
Phone: (650) 752-0990 ext.104
Fax: (650) 752-0995